

WHAT IS CLAIMED IS:

1. A packet communicating system comprising:

an optical line termination (hereinafter referred to as OLT) for subsidiarily connecting optical network units (ONU)

5 by the passive double star type (PON), said OLT having a function for terminating the physical layer of the PON and controlling bandwidths in physical lines between the OLT and the ONU; and

a broadband access server (BAS) connected to said OLT, said BAS having a function for authorizing users communicating
10 with the Internet, via the ONU and the OLT,

wherein said BAS having a function for controlling said OLT system through a special physical line to the OLT provided in the BAS for controlling, using information of the users obtained from a RADIUS server managing information of the users
15 when authorizing the users.

2. A packet communicating system comprising:

an optical line termination (OLT) for subsidiarily connecting optical network units (ONU) by the passive double star system (PON), said OLT having a function for terminating
20 the physical layer of the PON and controlling bandwidths in physical lines between the OLT and the ONU; and

a broadband access server (BAS) connected to said OLT, said BAS having a function for authorizing users communicating with the Internet via the ONU and the OLT,

25 wherein said BAS having a function for controlling said

OLT system by sending and receiving control packets between the BAS and the OLT through a physical line provided between the BAS and the OLT to transfer user packets exchanged between the Internet and the users, using information of the users
5 obtained from a RADIUS server when authorizing the users.

3. A packet communicating system comprising a broadband access server (BAS) having a function for authorizing the users in an optical access network based on the passive double star system,

10 wherein said BAS having a line interface provided with a function for terminating the physical layer of the PON and a function for controlling bandwidths, and controlling the line interface through a system control bus within the BAS, using user information obtained from the RADIUS server during user
15 authorization.

4. The packet communicating system according to claim 1,

wherein the BAS is provided with a special physical line to OLT for system control, and having a function for sending
20 and receiving packets for controlling user bandwidths, and setting bandwidths for the users to send and receive packets, through said special physical line.

5. The packet communicating system according to claim 2, wherein said packet communicating system having a function
25 for sending and receiving user packets using a physical line

provided between the BAS and the OLT to send and receive packets for controlling user bandwidths and for setting bandwidths for the users to send and receive packets.

6. The packet communicating system according to claim
5 3, wherein said packet communicating system having a function for setting a bandwidth for the users to send and receive packets through the line interface using the system control bus within the BAS.

7. The packet communicating system according to claim
10 4, wherein said packet communicating system having a function for controlling bandwidths for the users to send and receive packets, allocated between the ONUs and the OLT, according to the number of users accommodated under the ONUs or bandwidths allocated to the individual users.

15 8. The packet communicating system according to claim 4, wherein said packet communicating system having a function for controlling bandwidths for the users to receive packets between the OLT and the ONUs for each of users accommodated under the ONUs.

20 9. The packet communicating system according to claim 5, wherein said packet communicating system having a function for controlling bandwidths for the users to send and receive packets, allocated between the ONUs and the OLT, according to the number of users accommodated under the ONUs and bandwidths
25 allocated to the individual users.

10. The packet communicating system according to claim
5, wherein said packet communicating system having a function
for controlling bandwidths for the users to receive packets
between the OLT and the ONUs for each of users accommodated
5 under the ONUs.

11. The packet communicating system according to claim
6, wherein said packet communicating system having a function
for controlling bandwidths for the users to send and receive
packets, allocated between the ONUs and the OLT, according to
10 the number of users accommodated under the ONUs and bandwidths
allocated to the individual users.

12. The packet communicating system according to claim
6, wherein said packet communicating system having a function
for controlling bandwidths for the users to receive packets
15 between the OLT and the ONUs for each of users accommodated
under the ONUs.

13. A packet communicating system comprising:

a plurality of optical network units;

a star coupler connected with the plural optical network
20 units; and

a packet communicating apparatus connected with the star
coupler,

wherein the packet communicating apparatus multiplexes
sending data to the plural optical network units and sends the
25 multiplexed sending data to the star coupler,

the star coupler broadcasts the multiplexed sending data to the optical network units, and

each of the optical network units receives data directed to that optical network unit,

5 wherein the packet communicating apparatus comprises:

an optical line termination having a function for controlling bandwidths between the optical line termination and the optical network units; and

a server, connected to the optical line termination, that
10 has a function for authorizing users who communicate with a network via the optical network units and the optical line termination, and

wherein the server uses user information used during the user authorization and the optical line termination sets
15 bandwidths on a user basis.